

511,499

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/082765 A1

- (51) International Patent Classification⁷: **C04B 28/14**, 24/26 73772 (US). **WHITESIDE, Eldon, L.** [US/US]; 5539 Quincy Street, Hinsdale, IL 60521 (US). **BEDWELL, William, K.** [US/US]; RR1, Box 26, Okeene, OK 73763 (US). **KALIGIAN, Raymond, A., II** [US/US]; 2020 Wellington Ct., Geneva, IL 60134 (US).
- (21) International Application Number: PCT/US03/09397
- (22) International Filing Date: 27 March 2003 (27.03.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/367,920 27 March 2002 (27.03.2002) US
- (71) Applicant (for all designated States except US): **UNITED STATES GYPSUM COMPANY** [US/US]; 125 S. Franklin Street, Chicago, IL 60606 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LETTKEMAN, Dennis, Mark** [US/US]; 1316 N. Noble, Watonga, OK
- (74) Agent: **MICKELSON, Carole, A.**; Greer, Burns & Crain, Ltd., 300 South Wacker Drive, Suite 2500, Chicago, IL 60606 (US).
- (81) Designated States (national): CA, JP, MX, US.
- (84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH MOLECULAR WEIGHT ADDITIVES FOR CALCINED GYPSUM AND CEMENTITIOUS COMPOSITIONS

(57) Abstract: A mixture is used in conjunction with water is used for preparing a slurry that hydrates to form an exterior gypsum cement. The mixture includes 30-70 % by weight hydraulic cement, 30-70 % by weight calcined gypsum and 0.05-2.5 % polycarboxylate. When the mixture is added to water less than 40 weight % based on the weight of the mixture, a slurry is formed that expands very little while it cures.

WO 03/082765 A1